

Abstract

Apparatus and Method for resource arbitration

An arbitration process sets the connections to be made between ingress and egress ports of a crossbar switch of a data switching system. A weight parameter is used for each pair of ingress and egress ports. Connection requests are generated indicating ingress ports to be connected to egress ports. A selection is made among conflicting connection requests, to produce a connection proposal for each egress port. Any connection request for which respective weighting parameter is zero is not selected. When one of the connection requests is realised, the weight parameter corresponding to this connection is decreased by one. All the weight parameters for a given egress port are re-set to default values in the case that there are no connection requests for that egress port with non-zero weights.

15 Fig. 3